

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for transmitting a plurality of clinical images from a database of clinical images to a reviewer over a network, the method comprising:

providing a very low resolution copy of at least some of the clinical images from the database to the reviewer such that the reviewer can request an image for review;

receiving a request for a first clinical image from the reviewer;

transmitting a low resolution copy of the first clinical image in a relatively highly compressed form to the reviewer;

preparing a relatively less compressed and lossy higher resolution copy of the first clinical image at least in part simultaneously with transmitting the lower resolution copy of the first clinical image to the reviewer; and

upon receipt of a request for higher resolution, transmitting the higher resolution copy of the first clinical image to the reviewer.

2. The method of Claim 1, wherein the higher resolution copy of the first clinical image comprises higher spatial resolution than the lower resolution copy of the first clinical image.

3. The method of Claim 1, wherein the higher resolution copy of the first clinical image comprises higher temporal resolution than the lower resolution copy of the first clinical image.

4. The method of Claim 1, wherein the clinical images comprise ultrasound images from a patient examination.

5. A method for transmitting a plurality of clinical images from a database of clinical images to a reviewer over a network, the method comprising:

providing a very low resolution copy of at least some of the clinical images from the database to the reviewer, wherein each very low resolution copy is

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associated with a dynamic sequence of images, such that the reviewer can request an image for review;

receiving a request for a first clinical image from the reviewer;

transmitting a low resolution copy of an intermediate image from the dynamic sequence of images associated with the first clinical image in a relatively highly compressed form to the reviewer;

preparing similarly low resolution copies of first additional images from the dynamic sequence of images associated with the first clinical image at least in part simultaneously with transmitting the intermediate image;

transmitting the low resolution copies of the first additional images to the reviewer;

preparing similarly low resolution copies of second additional images from the dynamic sequence of images associated with the first clinical image at least in part simultaneously with transmitting the first additional images; and

transmitting the low resolution copies of the second additional images to the reviewer.

6. The method of Claim 5, wherein the preparation and transmission of additional images can be interrupted by the reviewer.

7. The method of Claim 6, wherein the reviewer interruption may include a request for higher resolution images, the method further comprising the steps of:

receiving a request for higher resolution images;

transmitting a high resolution copy of an intermediate image from the dynamic sequence of images associated with the first clinical image in a relatively less compressed form to the reviewer;

preparing similarly high resolution copies of first additional images from the dynamic sequence of images associated with the first clinical image at least in part simultaneously with transmitting the intermediate image; and

transmitting the high resolution copies of the first additional images to the reviewer.

8. A system for transmitting clinical images from a database of images to a reviewer comprising:

a server comprising a processing unit, a storage device containing the database of images, and first software capable of running on the processing unit, the first software adapted to retrieve, compress, and transmit clinical images from the database of images;

a review station accessible to the reviewer and connected to the server through a network, the review station comprising a processing unit, a display capable of displaying clinical images from the database of images, and second software adapted to request, receive and display clinical images from the database of images;

wherein the first software is adapted to receive requests from the second software for at least one specified clinical image from the database of images, and upon receipt of such request compresses the requested at least one clinical image using a relatively low resolution compression scheme, and transmits the low resolution compressed image to the review station for display; and further

wherein the first software is adapted to receive requests from the second software for higher resolution, and upon receipt of such request compresses the specified at least one clinical image using a relatively high resolution compression scheme, and transmits the high resolution compressed image to the review station for display.

9. The system of Claim 8, wherein the first software is further adapted to prepare the higher resolution compressed image at least in part simultaneously with transmission of the low resolution compressed image to the review station.

10. The system of Claim 8, wherein the database of images comprises images from ultrasound examinations.

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11. The system of Claim 8, wherein the higher resolution compression scheme does not remove any clinically relevant information from the compressed image.

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